DOCUMENT RESUME

ED 206 689 TM 810 587

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TITLE Utilization Frameworks for Evaluation Reporting.
INSTITUTION NTS Research Corp., Durham, N.C.
PUB DATE Apr 81
NOTE 34p.; Paper presented at the Annual Meeting of the American Educational Research Association (65th, Los Angeles, CA, April 13-17, 1981).

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Evaluation; *Information Dissemination; Information Needs; *Information Processing; Literature Reviews; *Models
IDENTIFIERS Dissemination Analysis Group Model; *Evaluation Utilization; Knowledge Production and Utilization; Levels of Use Scale (Hall and Louck)

ABSTRACT

Two utilization and implementation frameworks (known as Knowledge Production Utilization (KPU) frameworks) are related to the planning and reporting aspects of an evaluation: the Dissemination Analysis Group (DAG) model and: the Halland Loucks' Level of Use Scale (LoU). This comparison is set against a background wherein literature is reviewed to exemplify how such frameworks can be used to modify current practices, relate evaluation to the needs of the user, create demand, facilitate cooperation, target reporting, and increase utilization of evaluation. The four levels of dissemination--spread, exchange, choice and implementation--which constitute the DAG model, are detailed. This is followed by an outline of eight levels of utilization on the LoU Scale: non-use orientation, preparation, mechanical use, routine, refinement, integration and renewal. A comparison of the two models is presented in terms of evaluator role, evaluation reporting methods, and their respective strengths and weaknesses. It is suggested that the DAG model helps to focus the levels at which evaluation reports are disseminated, and the LoU Scale can be successfuly used to identify evaluator roles and reporting techniques most appropriate during different stages of evaluation maturity. (Author/AEF)

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Utilization Frameworks for Evaluation Reporting[1]

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During the mid-seventies a considerable number of the writings which were included in the body of knowledge known as dissemination literature involved the utilization of findings from educational research development endeavors. This field of knowledge became known as KPU (Knowledge Production Utilization) and led eventually to the formation of a Special Interest Group within AERA on Research Utilization (SIGRU).

Several information utilization and implementation frameworks were developed during this period. Two of the more popular frameworks emerged from the work of the Dissemination Analysis Group (DAG, 1977) and from Hall and Loucks (1977). The DAG model specifies four levels of the dissemination of information: Spread, Exchange, Choice, and Implementation. Hall and Loucks developed a Levels of Use (LoU) scale which includes eight levels of utilization of an innovation ranging from non-use to renewal.

Although these information and implementation frameworks have been used with increasing frequency by the developers of innovations in universities, large city public school systems, and educational research and development laboratories and centers, they have received little attention from evaluators. During the past two years at the AERA Annual Meetings, dissemination terms such as linker, one-way communication (Spread), and knowledge utilization have become

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[1] Paper presented as part of a session entitled "After the Evaluation Report: Getting Action." 1981 AERA Annual Meeting, Los Angeles, California, April, 1981.

"in" phrases. Perhaps the time is right for evaluators to explore the implications of dissemination findings in their own field. A further stimulus for such application comes from the recent federal initiative towards increasing the usability and utilization of evaluation findings, including a large-scale NIE study being conducted by Huron Institute.

The primary purpose for the development of this paper is to relate two popular utilization and implementation frameworks to the planning of the reporting aspects of an evaluation. Examples are presented which exemplify how these utilization frameworks can be used to target reporting and increase the chances for the utilization of evaluation results. However, first a review of the related literature sets the context.

Review of Literature

In a previous paper, one of the authors presented a model of school district influences on the use of evaluation and testing information (Haenn, 1980). The model identifies three general factors which appear to affect the utilization of evaluation findings: organizational characteristics, personal characteristics, and information characteristics.

Organizational Characteristics

Organizational characteristics concern structure, climate, and politics of organizations and can affect organizational receptivity to and utilization of evaluation findings. Many of the organizational characteristics are static and somewhat immutable to change (e.g., organizational size, complexity, and leadership tenure). Other organizational characteristics can be changed, but such change must come from within. Examples of these characteristics are managerial style, decision-making channels, organizational climate, change in leadership, and political environment decision-making.

Those organizational characteristics subject to the most modification and influence by evaluators are interpersonal communication and credibility of the evaluation function. Evaluators must lessen the gulf which often exists between themselves and potential users of the evaluation information (Caplan and Barton, 1976; Huron Institute, 1979).

Personal Characteristics

Personal characteristics affect the utilization of evaluation information by individuals. All of these personal characteristics can be modified by evaluators, although such modification may require substantial effort. Personal characteristics consist of information needs, interest in evaluation, and personal abilities.

The information needs of an individual affect the type and amount of information used. Individual information needs are defined by Mason (1978) as the difference between a person's overall needs and the capacity of that individual to fill some or all of those needs. In other words:

$$\textit{information needs} = \textit{overall needs} - \textit{capacity}$$

Often an individual is unaware of his or her information needs. Systematic needs assessment on the organizational level and self-sensing at the individual level are two ways of assessing needs (Havelock and Lingwood, 1973). Additional needs can be sensed by examining the discrepancy between plans and actual operations (Guba, 1975). Evaluators can assist in the process of the information needs identification.

The degree to which potential users are interested in evaluation findings is another important consideration in effective information usage (Havelock and Lingwood, 1973; Young, 1978). Individuals who are open to new ideas (Havelock and Lingwood, 1973) and to differing values (Luschinski, 1963) utilize information more extensively. The tendency of decision-makers to distrust evaluation,

to insist on autonomy from evaluation findings, and to make decisions based on personal experience or familiar activities and theories rather than evaluation information is discussed by Lange and Speiss (1974).

To utilize information effectively, an individual must have more than information needs and commitment. Individual skills and capabilities especially in needs expression and articulation, problem-solving, and adaptation and integration skills, also are important (Havelock and Lingwood, 1973).

Informally collected information may play an equal or larger role than evaluation data in decision-making (Caplan, 1976; Cohen and Garet, 1975; Rossi, 1967; Weiss, 1970). Hoover (1972) found that educators tend to rely on face-to-face communications with colleagues, anecdotal information, and advice of others more than on general educational information. More sophisticated users will frequently "look to information to confirm . . . and to refine, rather than revamp strategies" (Crandall and Harris, 1978).

Decision-makers must take initiative to actually make decisions whether or not they use available information (Alkin et al., 1979). Hood and Blackwell (1976) report that "patterns of information use may be as much personal style as they are requisites of the user's job or position" (p. V-2). Therefore, evaluators must be prepared to address these personal characteristics to obtain effective utilization of evaluation findings.

Methodological Characteristics

Evaluators can have their most influence on the ways in which evaluation findings are reported and disseminated. Unfortunately, evaluation all too often is conducted in a vacuum which further decreases the chances for effective utilization of the evaluation results.

The role of the evaluator and the evaluation greatly affect the utilization of the evaluation findings. The purposes of testing in evaluation activities

should be defined clearly. Unless evaluations are purposeful and provide information which can fill existing needs, the results will not be used effectively. Van Geel and Tyll (1970) found there is a "fundamental incompatibility between the demands of evaluation and the vested interests of many public school systems as they operate today." The relevance of information to a decision which must be made is the primary test of its validity (Patton, 1978; Madaus et al., 1979). Also the credibility of the evaluator plays a major role in determining the degree of utilization of the evaluation results (Lange and Speiss, 1974; Guba, 1975).

One major methodological constraint associated with local school evaluations which reflects their utility is that they tend to be summative rather formative (Weiss and Rein, 1972; Lyon et al., 1978; Yeh, 1978). Nielson (1975), in a study comparing program managers' perceived needs with results of formal evaluations, discovered that impact data are not the type of information required to improve programs. There seems to be a major conflict between the information needs of government-mandated evaluations which require summative information (e.g., ESEA Title I) and locally-useful information which needs to be more formative.

A considerable number of policy-related evaluations are being implemented by the federal government. However, research shows that single studies rarely affect policy, but rather tend to have a cumulative effect (Cohen and Garet, 1975). A study in California found that the utility of evaluations for making policy decisions was severely limited by inadequate reporting, methodological weakness, and a lack of integration of findings from different studies (California State Legislature, 1975). The nature of evaluation findings often contributes to their non-use since . . .

> . . . the findings of an evaluation are often muddy; determining what constitutes the rational response is highly programmatic; and deciding whether the response was made in reaction to the evaluation

or to other forces is equally difficult (Alkin et al., 1979, pp. 29-30).

The characteristics of the evaluation report, its presentation and distribution greatly influence subsequent use of the reported results. Quality of the information reported has been identified by many writers as a major contributor to the use or non-use of evaluation findings (e.g., Brittain, 1970; Guba, 1975; Armor et al., 1976; Osterlind, 1979). In addition, other methodological problems include the appropriateness of the questions posed (Young, 1978), the timeliness of reporting (Standards, 1978; Wholey et al., 1979), clarity of the report (Alkin et al., 1979), and the feasibility of using the information (Caplan, 1976).

Another key factor affecting the utility of evaluation reports is their readability. Although complex and technical empirical reports may serve to promote the professional identities of evaluators (Berger and Luchmann, 1976) and occasionally serve to legitimize decisions because of their apparent credibility (Edelman, 1964), such reports more frequently tend to induce dismay and disuse (Chelimsky, 1977; Strang et al., 1977).

The use of dissemination activities and reporting for creating awareness and usage of information is very important. Information which is not known cannot be utilized. All too often test results are filed, and evaluation reports are issued and then forgotten. The direct relationship of the recency of an evaluation report and the possibility of its being used effectively has been noted (Huron Institute, 1979).

User-Oriented Evaluation

The model proposed by Haenn (1980) identifies three strategies which can be used to facilitate the use of evaluation information: creating demand, facilitating cooperation, and improving reporting practices. Each of these strategies assumes a proactive role by the evaluator.

Creating Demand

Until there is a felt need by one or more decision-makers for information, evaluation results will not be used. One way to create a demand for evaluation is by involving the potential decision-makers in the evaluation planning process. Determine what their goals, objectives, and even hidden agendas are and try to provide for the collection of as much of this information as is practical. In this way, you actually can get these decision-makers to "buy into" the evaluation process.

A second method of creating demand involves employing training techniques. Areas in which training could stimulate the need for evaluation and testing information include individual and group needs assessment, increasing problem-solving abilities, and increasing the ability to express and articulate needs.

Facilitating Cooperation

The above techniques also help to facilitate cooperation between evaluators and users. Cooperation between evaluation personnel and decision-makers is necessary for effective utilization of information; interpersonal communication is essential on establishing this cooperation. Cooley and Lohnes (1969) place much of the emphasis towards usage on administrators, urging them to work with and have input from teachers, the public, and even the legislature in order to have an efficient, well-run evaluation system. Leadership and personal interaction are especially important in the facilitation of information utilization (Sieber et al., 1972; Louis et al., 1978).

Evaluators must interact with decision-makers to overcome their skepticism and anxiety towards new information (Sieber et al., 1972), remove the "threat" associated with evaluation (Abt, 1979), increase their receptivity to evaluation (Smith, 1976), provide for personal involvement and commitment (Patton et al., 1978) and encourage "ownership" (Strang et al., 1977) toward the evaluation.

Differences in values are often one source of conflict between evaluators and users of evaluation information. Havelock (1964) discusses six ways to overcome these value conflicts. By not ignoring the values of others, utilization of information can be increased. In addition to maintaining contact with decision-makers, evaluators should determine what decisions and supportive data are needed by decision-makers to better focus the evaluation (Hawkins et al., 1978). This will entail more planning and time, and require a broader definition of evaluation than is generally used (Patton et al., 1978). In fact, Jackson (1977) believes a three-year planning and evaluation cycle is necessary in order to increase the probability that school personnel will utilize the results to improve school practices.

Two evaluation systems directly address this problem of more systematic planning and involvement of decision-makers in the evaluation process. The Information Based Evaluation (IBE) procedure proposed by Stenner (1974) includes procedures for specifying the relative roles and functions of users of evaluation information. Utilization Focused Evaluation, proposed by Patton (1978), provides processes for conducting evaluations which will yield information which is more valuable to potential users. Both of these systems rely heavily on the direct involvement of potential users in all phases of the evaluation process. By developing a cooperative testing and evaluation system, utilization of the results can be facilitated greatly.

Another method of increasing utilization involves the provision of technical assistance, especially in the provision of personalized services. The importance of personal communication in the effective transmission and utilization of information has been thoroughly noted (see especially Strang, 1977, for a review of the literature). Training can facilitate the use of quality materials even when the evaluation has little access to graphic designers and has a limited budget. The technical assistance strategy should be coordinated

between all involved parties, stating explicit responsibilities. Entry procedures and relationship building are important to establish initial credibility of the technical assistance effort, mutual obligations of both provider and recipient, and continuing assessment of functions and services (Center for New Schools, 1977). The importance of mutual obligations must not be understated as technical assistance should be cooperative effort (Wholey et al., 1971).

Improving Reporting Procedures

Weiss (1972) presents two additional managerial tactics which can be used to increase utilization:

- the prompt completion of the evaluation and the early release of the results; and
- the use of effective methods of presentation in disseminating the findings.

Reports should not be written for evaluators; instead, they should be useful to their intended audience (Datta, 1977). Prior knowledge about each audience should be used to target the reporting of information to maximize usage (Loucks and Myers, 1978). Whenever possible, reporting should be adapted to the managerial styles of potential decision-makers (Cox, 1977). Practitioners and decision-makers should be provided with concrete answers to specific problems or with the syntheses of pertinent information to enhance the practicality of the results or expedite their application (Hawley, 1976).

Obvicusly, evaluators must do needs sensing activities of their own in order to conduct the evaluation activities which can provide the appropriate information to meet the needs of potential users. In addition, the technical adequacy of the report, its clarity and format also are important determinants of the utilization of evaluation and testing information.

Applying KPU Models to Evaluation Reporting

The user-oriented approach to evaluation will greatly increase the probability that the results of a particular evaluation will be used to support current methods or suggest programmatic changes. However, this approach is costly in terms of both resources and budget. Where the user has not been actively engaged in the evaluation process, there are other approaches which can be utilized to increase the potential for utilization of the evaluation findings. Two of these approaches are based on models which were developed within the field of knowledge which has become known as knowledge production utilization (KPU). Both have applications for enhancing the utility of evaluation reporting. The first approach employs the DAG model of dissemination of information. The second approach uses the eight Levels of Use developed by Hall and Loucks.

DAG Model of Dissemination

The Dissemination Analysis Group (DAG) defined the term "dissemination" by providing a four-level functional definition. These four levels are:

LEVEL 1 - Spread: the one-way casting out of knowledge in all its forms: information, products, ideas and materials, "as though sewing seeds."

LEVEL 2 - Exchange: the two-way or multi-way flow of information, products, ideas and materials as to needs, problems, and potential solutions.

LEVEL 3 - Choice: the facilitation of rational consideration and selection among those ideas, materials, outcomes of research and development, effective educational practices, and other knowledge that can be used for the improvement of education.

LEVEL 4 - Implementation: the facilitation of adoption, installation, and the ongoing utilization of improvements. (DAG, 1977, pp. 3-4)

Although not developed to analyze the reporting of evaluation results, the four levels could be used to describe the ways in which evaluation reporting is

conducted. Examples of how each of these four levels have or could be used in evaluation reporting are given below.

Spread. Evaluators are good at casting out knowledge. The trouble is that it is often done through thick reports that no one reads. Alternatives include determining the types of information considered important to practitioners and then presenting such information orally, in media presentations, or in printed abstracts. Brochures containing a summary of evaluation findings are often useful. The synthesis of existing evaluation findings can often be presented effectively in an attractive brochure form, but these syntheses are rarely used. Other examples of the Spread of evaluation findings are journal articles, ERIC submissions and newspaper releases. (For additional information about Spread activities for evaluators see Standards for Evaluation of Educational Programs, Projects and Materials written by the Joint Committee on Standards for Educational Evaluation, 1981).

Exchange. Evaluation information is shared in an Exchange fashion in discussions of findings with individuals or groups of practitioners. By helping others to understand evaluation findings themselves these people can then use this information in discussions with other practitioners. A congressional hearing format could be used as an effective two-way mode of communicating evaluation findings which stimulates an Exchange of information and opinions (Stenzel, 1979). With this format, decision-makers can direct questions to the evaluator and thus establish a dialogue about the findings in terms that are more meaningful to the decision-makers. Exchange of information is used to a limited degree by evaluators but could be used much more. Additional uses of Exchange include preliminary discussions with potential decision-makers to determine their information needs and audit or meta evaluations of previous studies to get a "second opinion" (See Stufflebeam, 1974).

Choice. Good descriptive data and outcome findings from an evaluation can be most useful if presented in such a way that decision-makers receive the information comparing alternative findings. This method requires considerable extra effort and is rarely used. Some examples of presentation formats involving Choice are the Adversary Hearing (Wolf, 1979) and the consumer advocacy approach to evaluation (Scriven, 1967).

Implementation. Formative evaluation focused on providing information to project staff for purposes of program improvement can be a very useful feature of program implementation. An evaluator can also work with staff who are attempting to adopt or adapt an existing program to identify key elements of the program and determine the local deviation from a particular innovation. This level has received almost no attention. However, with the increasing emphasis on program improvement, more formative evaluation efforts should be placed on the implementation of program improvements. Such formative evaluations to be effective, require a closer working relationship between the evaluator and the potential user than is typically found in the more traditional summative evaluations.

The four DAG levels of dissemination seem to deal with two different dimensions when used as a framework for evaluation reporting. The first two levels, Spread and Exchange, seem to address only how information is communicated (i.e., through one or two/multiple communication channels). Neither level specifies a purpose for how the information would be used. The last two levels, Choice and Implementation, address two purposes for using the evaluation information but ignore how the information is communicated. Thus, Choice or Implementation dissemination could occur through Spread or Exchange of ideas. There are other major purposes of evaluation utilization which are ignored by the model such as

using new information to broaden support for an existing concept or to persuade others to collaborate in a new and different way (e.g., the new relationship between local education agencies and CETA programs).

One way to examine the four DAG levels of dissemination as they apply to evaluation reporting is to examine each level in terms of its purposes, the roles which the evaluator assumes, and methods for reporting the evaluation findings. This analysis is presented in Table 1. Note the greatly different purposes for each level, the distinctly different roles the evaluator assumes, and reporting techniques which are available for each level.

Table 2 presents the strengths and limitations of each level as applied to evaluation reporting. No one level is best for all types of reporting. This implies that multiple reporting methods should be used to address differing purposes and overcome the limitations of any one level.

Hall and Loucks' Level of Use Model

Gene Hall and Susan Loucks (1977) developed a Levels of Use (LoU) models which examines whether or not a treatment is actually being implemented in a new setting. Eight levels are defined ranging from Nonuse to Renewal. These levels are:

Levels of Use	Definition of Use
0 Nonuse	State in which user has little or no knowledge of the information, no involvement with the information and is doing nothing toward becoming involved.
1 Orientation	State in which the user has recently acquired information and/or has recently explored or is exploring its value orientation and its demand upon user and user system.
2 Preparation	State in which the user is preparing for first use of the innovation based upon information.

TABLE 1

ANALYSIS OF THE EVALUATION REPORTING IMPLICATIONS OF THE DAG MODEL OF DISSEMINATION

	SPREAD	EXCHANGE	CHOICE	IMPLEMENTATION
Purposes	1. Deliver findings back to clients and funder to satisfy contract requirement 2. Share information with other possible users 3. Advance theory or the state of the art in the area being evaluated	1. Clarify purposes for the evaluation or decisions to be made 2. Provide feedback discussions on the preliminary findings 3. Jointly review findings to develop appropriate recommendations	1. Facilitate component or program comparisons and alternatives for client, funder or potential adoptor 2. Provide information to help client make rational choices	1. Identify problems in implementation of program changes and document how a new program is implemented 2. Determine perceptions of key audiences regarding the implementation and their suggestions for improvement
Role of the Evaluator	1. Researcher/Fact Finder 2. Advocate of the findings	1. Clarifier 2. Dialogue with client 3. Colleague	1. Help articulate criteria for choices 2. Consumer advocate 3. Negotiations facilitator	1. Assist in problems' identification and resolution 2. Documenter 3. Team member
Methods of Reporting the Evaluation	1. Written reports, abstracts, and news releases 2. Audiovisual presentations 3. Photo essay reporting 4. Entry of documents into ERIC and other systems	1. Group discussions or panel presentations 2. Congressional hearing format	1. Consumer guide type comparative reporting 2. Adversary hearing 3. Debate	1. Periodic debriefings with program staff 2. Preparation of JDRP submission 3. Oral presentations of findings to potential adoptors

TABLE 2

STRENGTHS AND LIMITATIONS OF THE DAG MODEL OF DISSEMINATION RE EVALUATION REPORTING

	SPREAD	EXCHANGE	CHOICE	IMPLEMENTATION
Strengths	1. Relatively inexpensive 2. Can reach a nationwide audience 3. Less threatening to the evaluator	1. Helps insure more valid questions and interpretation of data 2. Helps create feeling of shared ownership and responsibility for the evaluation 3. Interaction can clarify ambiguous or technical language	1. Clarifies bases for choice 2. Can help focus evaluation on the decision to be made 3. Facilitates consideration of trade-offs	1. Likely to be ongoing evaluation 2. Can provide rich description 3. Findings likely to be more accepted by practitioners
Limitations	1. Purposes for the evaluation may not be clear 2. Findings may be irrelevant to policy-maker and practitioners 3. Audiences for the evaluation are often undefined or unknown	1. Opinions of program staff may bias interpretations 2. Generally more costly than spread 3. Credibility of the evaluator may be questioned	1. Decisions are often made on basis other than evaluation findings 2. Many decisions involve more than a single one-time choice 3. Findings may be useful to only a limited audience	1. Purposes for making changes or using/adapting an innovation sometimes are not shared and are multiple 2. Some implementors see evaluation as an annoyance 3. Comprehensive evaluation may take time away from other important implementation issues

3 Mechanical Use	State in which the user focuses most of his/her effort on the short-term, day-to-day use of the innovation with little time for reflection. Changes in use are made more to meet user needs than client needs. The user is primarily engaged in a step-wise attempt to master the tasks required to use the innovation, often resulting in disjointed and superficial use.
4a Routine	Use of the innovation is stablized. Few, if any, changes are made in ongoing use. Little preparation or thought is given to improving the innovation or its consequences.
4b Refinement	State in which the user varies the use of the innovation to increase the impact on clients within the immediate sphere of influence. Variations are based on knowledge of both short- and long-term consequences for clients.
5 Integration	State in which the user is combining his/her own efforts to use the innovation with related activities of colleagues to achieve a collective impact on clients within their common sphere of influence.
6 Renewal	State in which the user reevaluates the quality of use of the innovation, seeks major modifications of or alternatives to present innovation to achieve increased impact on clients, examines new developments in the field, and explores new goals in self and the system. (Hall and Loucks, 1977)

The model was developed to analyze the level of implementation of an innovation. Murray and Quilling (1980) applied these levels to the implementation of the Title I Evaluation and Reporting System by local and state education agencies. However, the Levels of Use (LoU) can also be redefined to provide a useful heuristic for examining the degree to which any evaluation report and its findings are utilized. One possible framework for defining each of the levels for evaluation report utilization is given below:

Levels of Use	Definition of Use for Evaluation Reporting
0 Nonuse	The evaluation report and its findings "do not see the light of day."
1 Orientation	An executive summary of the evaluation report is read by or an oral presentation is given to one or more decision-makers, but no findings are used.

2	Preparation	The evaluation report is read and signed-off on by one or more decision-makers, and a decision is made to utilize the findings, but no utilization has yet occurred.
3	Mechanical Use	The evaluation report is reviewed by program administration or other decision-makers but the findings are utilized only to support the present program or changes already desired by program staff.
4a	Routine	The evaluation report is read and signed-off on by all major decision-makers, and some of the evaluation findings stimulate minor programmatic changes which change program directions.
4b	Refinement	Significant programmatic changes occur, usually stimulated by recommendations of major decision-makers following a review of the evaluation report.
5	Integration	Major decision-makers are involved in all stages of the evaluation process for planning through reporting and the evaluation results are used for program improvement.
6	Renewal	Program improvement evaluation with a user-oriented evaluation focus is used as the basis of all programmatic evaluations with program changes based on evaluation findings and for planning the next evaluation cycle.

The levels are defined from the perspective of the degree of utilization of a specific evaluation report or evaluation reports in general in a given reporting unit. The levels are not necessarily stages whereby each stage must be satisfied before the next stage can be achieved. However, the Levels of Use do represent a continuum with the higher levels being the most desirable from the point of utilization of the evaluation findings.[2] Examples of how an evaluator can address the situation if a given Level of Use has occurred are presented below.

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[2] It should be noted here that effective utilization of an evaluation report does not necessarily mean it stimulates changes or program improvements where none are warranted. In this case, the evaluation results can be used to confirm the effectiveness of the program, project or product being evaluated.

0 Nonuse. The evaluator should contact potential users and decision-makers to see if the report has been received and, if so, if it has been read. In many instances the report has not been read because of time constraints. The evaluator must stimulate these decision-makers to become aware of at least the key findings. The evaluator may decide to write abstracts for each decision-maker which focus on their particular levels of understanding and interests. The use of novel reporting practices such as the use of a photographic report (Templin, 1979) might prove effective. If the report has been buried because of political reasons, this could demonstrate the need for actively involving potential decision-makers during the planning phase of the evaluation and making them "stakeholders" in the evaluation results.

1 Orientation. At this level a few decision-makers have become involved with the evaluation report in that they are somewhat aware of its results and implications. But these same decision-makers may not fully be aware of the suggested changes or understand the implications of the report. At this level the evaluator should concentrate on a personal delivery approach. Schedule a brief meeting with each decision-maker for an oral presentation or give a media presentation to a group of decision-makers. Establish strong interpersonal linkages which can be built upon in the future.

2 Preparation. A decision has been made to utilize at least some of the findings or recommendations presented in the evaluation report, but no movement has occurred to implement these changes. There are several things the evaluator can do at this point to facilitate such implementation. First, make sure that all lines of communication are clear and it is understood what changes have been agreed upon. The evaluator should relate these proposed changes to the evaluation findings, relating the impact these changes might have upon the program and how they might affect each audience. As a further step, a timeline should be suggested for implementing these changes so the next evaluation cycle can determine their effects.

3 Mechanical Use. At this level the only evaluation report suggestions which are being/have been implemented are those which either support the effectiveness of the present program, incorporate program changes which might have occurred without the evaluation, or support a direction in which the program wanted to move anyhow. The evaluator faced with this situation must attempt to stimulate further improvements. He/she should support these "desired" improvements by evaluating their implementation while at the same time discussing additional changes with the key decision-makers. The evaluator must begin to establish a strong trust relationship with all concerned parties. Interim reports should be shared and there should be a number of discussions which take place.

4a Routine. The basic difference between this level and the previous level is that some changes stimulated by the evaluation findings are implemented. At this level the evaluator concentrates on building a trust in the roles of the evaluator and evaluation. Changes are monitored and documented in a formative mini-evaluation consisting of "snapshots" of the program. Instrumentation, if any, is simple and techniques such as ethnography (Wolcott, 1970) and journalism (Guba, 1978) can be employed. Program staff and participant reactions are also monitored.

4b Refinement. Major program improvements are occuring at this level and the evaluator becomes actively involved as a formative evaluator. Periodic progress reports are written and debriefings with program staff members occur to share tentative findings. Midstream alterations are made based on intermediate findings and the emphasis becomes one of fine tuning the modified program.

5 Integration. At the integration level at least one program or project is evaluated with a user-oriented evaluation focus. Potential decision-makers are involved in the evaluation planning process and are kept apprised of the progress of the evaluation. The evaluator must assume multiple roles. He/she

must plan the logisitics of conducting a user-oriented evaluation and must train participants as to their roles and functions. The evaluator has the responsibility of documenting the user-oriented evaluation process, especially indicating any side or ripple effects of the process. In addition, the evaluator is responsible for overseeing the timely completion of a comprehensive evaluation with its many reporting outcomes.

6 Renewal. At this point the user-oriented evaluation process is implemented systemwide or at least in all major evaluation efforts. Emphasis is on utilizing results for program improvement and to plan for subsequent evaluation efforts. The evaluator is actively involved in facilitating the user-oriented evaluation process. He/she may have to negotiate differences and manage potential or actual conflicts.

As was done with the DAG levels of dissemination, the Levels of Use can be examined in terms of their purposes, the roles which the evaluator must assume within each level, and methods for reporting evaluation findings at each level of evaluation implementation. This analysis is presented in Table 3. It is not anticipated that these levels of evaluation and reporting can be implemented within a one year period. Rather, these levels can represent stages of the development of the evaluation process. They can be used to determine present status and to guide future efforts. Note that the role of the evaluator changes from a relatively passive, isolated actor in the process to the key facilitator of the overall evaluation effort as user-oriented evaluation becomes established.

Table 4 presents the strengths and limitations of each level as applied to evaluation reporting. Unlike the DAG levels, the LoU represent increasing levels of complexity which place additional burdens on all personnel, especially the evaluator. The evaluator has to wear many different hats depending upon the

TABLE 3

ANALYSIS OF THE EVALUATION REPORTING IMPLICATIONS OF HALL AND LOUCKS' LEVELS OF USE (LoU)

	0 NONUSE	1 ORIENTATION	2 PREPARATION	3 MECHANICAL USE
Purposes	1. Develop awareness of the evaluation report and its findings 2. Stimulate reading of the evaluation findings	1. Encourage assimilation of evaluation findings 2. Develop awareness of the options of change	1. Synthesize evaluation findings with current status 2. Stimulate changes based on findings	1. Encourage implementation of program improvements 2. Stimulate further change
Role of the Evaluator	1. Abstractor 2. Promoter 3. Salesman 4. Needs assessor	1. Disseminator 2. Oral presenter 3. Develop interpersonal linkages	1. Facilitator 2. Proponent of change 3. Analyzer of available information	1. Discussant 2. Reviewer 3. Supporter
Methods of Reporting the Evaluation	1. Brief abstract 2. Executive summary 3. Illustrated brochure 4. Assess where each decision-maker "is at"	1. Special personal delivery 2. Oral presentations 3. Media presentations	1. Written and oral syntheses of evaluation results with agreed upon suggestions for changes. 2. Inventory of needed revisions and program impact 3. Timelines for implementing program improvements	1. Interpersonal interaction with potential key decision-makers 2. Written review of the program improvments

	4a ROUTINE	4b REFINEMENT	5 INTEGRATION	6 RENEWAL
Purposes	1. Develop confidence in the value of evaluation 2. Develop trust in the abilities of the evaluation	1. Support major program improvement 2. Evaluate program modifications	1. Establish the user-oriented evaluation process	1. Facilitate a comprehensive evaluation and testing program involving all concerning parties
Role of the Evaluator	1. Trust builder 2. Documentor	1. Monitor changes 2. Formative evaluator	1. Trainer 2. Planner 3. Technical assistant	1. Facilitator 2. Manager of conflict
Methods of Reporting the Evaluation	1. Personal encouragement of key movers for improvement 2. Document changes and change process	1. Periodic written reviews of the program improvements 2. Debriefing sessions with program staff	1. Document the user-oriented evaluation process 2. Comprehensive reporting	1. Comprehensive reporting 2. Recording systematic program changes

TABLE 4

STRENGTHS AND LIMITATIONS OF THE HALL AND LOUCKS' LEVELS OF USE (LoU) RE EVALUATION REPORTING

	0 NONUSE	1 ORIENTATION	2 PREPARATION	3 MECHANICAL USE
Strengths	1. Quick and easy to produce 2. Short pieces are easy to read 3. Good eye appeal stimulates use	1. Personal delivery very effective 2. Proactive approach	1. A challenging part of the evaluation process 2. Syntheses of existing information very useful to decision-makers	1. Develops interpersonal relationships needed at higher levels 2. Can be the turning point in the program improvement evaluation process
Limitations	1. Lacks depth 2. Difficult to capture findings in a brief document	1. Requires graphic capabilities 2. Busy administrators sometimes have little time for evaluators or evaluation results	1. Requires analysis and synthesis skills evaluator may not possess 2. Political constraints may limit the role of the evaluator	1. Evaluators may not possess the strong interpersonal skills needed 2. The political context may limit further use of the evaluation

	4a ROUTINE	4b REFINEMENT	5 INTEGRATION	6 RENEWAL
Strengths	1. Program personnel begin to value evaluation 2. Program personnel can provide significant input to the evaluation process	1. Program personnel able to see first hand the results of program 2. Formative evaluation provides evaluator with a "hands on" situation	1. Evaluation becomes a necessary component of the program being evaluated 2. Program personnel "buy into" the evaluation process	1. Evaluation becomes a part of the way the education process is implemented 2. District personnel "buy into" the evaluation process
Limitations	1. Established programs may resist being evaluated and program changes 2. Program personnel may resist change	1. Negative findings at this level can be discouraging 2. Hawthorne effects should not be confused with real outcomes	1. Requires a considerable effort in terms of budget and personnel, especially on the part of the evaluator 2. Considerable judgment by the evaluator is necessary to determine how much involvement by significant others is needed	1. Conflicts and limitations experienced at lower levels resurface as new personnel become involved 2. A constant balance is needed since all information needs may not be met within constraints

level being evaluated. Many of these alternative roles correspond to the alternative evaluation approaches summarized by Stufflebeam and Webster (1980).

Comparison of the DAG and LoU Models

A comparison of the strenghs and weaknesses of the DAG and LoU models relative to evaluation reporting is presented in Table 5. Both models provide useful heuristics for evaluation reporting. The DAG levels are especially useful for stimulating movement from Spread to Exchange and for facilitating Choice between alternatives. The Implementation level is on a different plane and seems better described within the Levels of Use.

The LoU model readily captures the maturity of the evaluation process from the perspective of utilization of reported results. This model can be used more readily than the DAG model to determine what roles the evaluator must assume and the extent to which evaluation results might be influencing program improvements.

Both models can be easily used by evaluators. Although there is little expense in applying the models to determine the level of evaluation report utilization, there are expenses concerned with implementing some of the alternative evaluation approaches suggested.

Summary

The DAG model of dissemination (1977) and the Level of Use scale developed by Hall and Loucks (1977) both provide useful heuristics for the planning of evaluation reporting. While the DAG model helps to focus the levels at which evaluation reports are being disseminated, the Levels of Use can be used to identify the evaluator roles and reporting techniques which are most appropriate during different stages of evaluation maturity. Both models readily can be applied to existing evaluation programs to guide future evaluation efforts.

TABLE 5

COMPARISON OF THE DAG AND LoU MODELS RE EVALUATION REPORTING

	DAG	LoU
Strengths	1. Presents two ways information can be communicated and two ways it can be used	1. Presents a more extended view of levels of implementation of the process of evaluation reporting
	2. Two/multiple-way communication in evaluation is often not used and thus this approach can serve as a useful heuristic for new modes of reporting evaluation	2. Considers the need to integrate evaluation reporting into the stages of the evaluation process
		3. Provides the evaluator with an awareness of the number of different hats he/she needs to wear
Limitations	1. Lacks adequate detail	1. Focuses more on evaluation reporting during the early and middle levels and more on changes in evaluation procedures at the latter levels
	2. Ignores other utilization purposes such as feasibility studies and outcome assessments of an initial program under development	2. Makes user-oriented evaluation the ultimate in evaluation processes - a concept which may not be accepted in some districts or evaluation studies

REFERENCES

Abt Associates. Technical Proposal, NIE-RFP-79-0020. Cambridge, MA, 1979.

Alkin, M.C., R. Duillak & P. White. Using Evaluations: Does Evaluation Make a Difference? Beverly Hills, CA: Sage Publications, 1979.

Brittain, J.M. Information and Its Use. New York: John Wiley & Sons, Inc., 1970.

California State Legislature, An Analysis of the Evaluation of State Educational Programs. Sacramento, CA: Office of the Legislative Analyst, 1975 (ED 114) (417).

Caplan, N. "Factors Associated with Knowledge Use Among Federal Executives." Policy Studies Journal, 1976, 4(3), pp. 229-234.

Caplan, N., & E. Barton. Social Indicators, 1973: A Study of the Power of Information and Utilization by Federal Executives. Ann Arbor: Institute for Social Research, 1976.

Center for New Schools. Assistance Strategies of Six Groups That Facilitate Educational Change at the School/Community Level. NIE-G-74-0052. February 15, 1977. ED 140394.

Chelimsky, A Symposium on the Use of Evaluation by Federal Agencies: Vol. II, METREK Division of the Mitre Corporation, 1977.

Cohen, D.K., & M.S. Garret. "Reforming Educational Policy with Applied Social Research." Harvard Educational Review, 1975, 45 (1), 17-43.

Cooley, W.W., & P.R. Lohnes. "How Can Evaluations Influence Decisions and Policies?" Evaluation Research in Education: Theory, Principles and Practice. New York: Wiley and Sons, 1969.

Cox, Gary B. "Managerial Style Implications for the Utilization of Program Evaluation." Evaluation Quarterly, 1977, 1 (3), 499-500.

Crandall, D.P., & R.C. Harris. "Views on the Utilization of Information by Practitioners." The Network, 290 South Main Street, Andover, MA 01810, September, 1978.

Datta, L.E. "Does It Work When It Has Been Tried? And Half Full or Half Empty?" In M. Guttentag (Ed.), Evaluation Studies Review Annual, (Vol. 2), 301-319. Beverly Hills, CA: Sage Publications, 1977.

Dissemination Analysis Group (DAG). Dissemination in Relation to Elementary and Secondary Education: Final Report of the Dissemination Analysis Group to the Dissemination Policy Council, January, 1977.

Edelman, M. The Symbolic Uses of Politics. Urbana, Illinois: University of Illinois Press, 1964.

Guba, E.G. "Problems in Utilizing the Results of Evaluation." Journal of Research and Development in Education, 1975, 8 (3), 42-54.

Haenn, J.F. "Reasons Why Testing and Evaluations Don't Inform." Paper presented at AERA Annual Meetings, Boston, MA. April, 1980.

Hall, G.E. and S.F. Loucks. "A Developmental Model for Determining Whether the Treatment is Actually Implemented." American Educational Research Journal, 1977, 14, pp. 263-276.

Havelock, R.G. Research Utilization Report: Analysis of Seminar Sessions. Institute for Social Research, 1964.

Havelock, R.G., & D.A. Lingwood. R&D Utilizational Strategies and Functions: An Analytical Comparison of Four Systems. Ann Arbor, Michigan: Center for Research on Utilization of Scientific Knowledge, 1973.

Hawkins, J.D., R.A. Roffman, & P. Osborne, "Decision Makers' Judgements, the Influence of Role, Evaluative Criteria, and Information Access." Evaluation Quarterly, 1978, 2 (3), 435-454.

Hawley, W.D. "Horses Before Carts: Developing Adaptive Schools and the Limits of Innovation." In Grove, R.E. and F.M. Wirt, Political Science and School Politics. Lexington, MA: Lexington Books, 1976.

Hood, P.D., & L. Blackwell. Key Educational Information Users and Their Styles of Information Use, Vol. I. San Francisco: Far West Laboratory for Educational Research and Development, 1976.

Hoover, C.W. "The ERIC Program: Problems and Prospects." In Access to the Literature of the Social Sciences and Humanities. Flushing, NY: Queens College Press, 1972.

Huron Institute. Technical Proposal, NIE-RFP-79-0020. Study of School District Use of Evaluation and Test Information. Cambridge, MA, 1979.

Jackson, A.W. "Co-operative School Evaluation in Queensland Primary Schools." Paper presented at the National Conference of the Australian Council for Educational Administration, Aguust 1977, (ERIC Document Reproduction Service No. ED 147 962).

Joint Committee on Standards for Educational Evaluation. Standards for Evaluations of Educational Programs, Projects and Materials. New York: McGraw-Hill Book Company, 1981.

Krathwohl, D.R. "The Evaluator as Negotiations Facilitator-Fact Finder." Educational Evaluation and Policy Analysis, 1980, 2(2).

Lange, R.R., & M. Speiss. "An Empirical Study of Four Providing Variables Affecting Utilization of Evaluation." Presented at AERA meeting, April 1974, Chicago.

Loucks, S.F., & E.C. Myers, "Improving the Usefulness of R&D Information by Responding to Audience Concerns and Practices." NTS Research Corporation, September 1978.

Louis, K.S., S. Rosenblum, & G. Spencer. "Dissemination, Utilization and Change in Schools." Cambridge, MA: Abt Associates, Draft, 1978.

Luschinsky, M.S. "Problems of Culture Change in the Indian Village." Human Organizations, 1963, 22, pp. 66-74.

Lyon, C.D., L. Doscher, & P. McGranahan. Evaluation and School Districts. Center for the Study of Evaluation, Los Angeles, CA: UCLA Graduate School of Education, December 1978.

Madaus, G.F., T. Kellaghan, E.A. Rakow, & D.J. King. "The Sensitivity of Measures of School Effectiveness." Harvard Educational Review, 1979, 49, pp. 207-230.

Mason, W. "Notes on User Capacity." Unpublished paper, 1978 (NIE).

Murray, S.L. and M.R. Quilling. "Delivering Technical Assistance: Can Change Constructs Help?" Paper presented at AERA Annual Meetings, Boston, MA, April 1980.

Nielsen, V.G. "Why Evaluation Does Not Improve Program Effectiveness." Policy Studies Journal, 1975, 3 (4), 385-390.

Osterlind, S.J. "What Makes a School Evaluation Work?" Educational Evaluation and Policy Analysis, 1979, 1(1), pp. 48-51.

Patton, M.W. Utilization-focused Evaluation. Beverly Hills, CA: Sage Publications, Inc., 1978.

Patton, M.G., P.S. Grimes, K.M. Guthrie, N.J. Brennan, B.D. French, & D.A. Blyth. "In Search of Impact: An Analysis of the Utilization of Federal Health Evalution Research." In T.D. Cook and Associates (Eds.), Evaluation Studies Review Annual, (Vol. 3), pp. 59-80. Beverly Hills, CA: Sage Publications, 1978.

Scriven, M.E. "The Methodology of Evaluation." In R.E. Stake (Ed.), Curriculum Evaluation. AERA Monograph Series on Curriculum Evaluation, Volume 1. Chicago: Rand McNally, 1967.

Sieber, S.D., K.S. Louis, and L. Metzger. The Use of Educational Knowledge: Evaluation of the Pilot State Dissemination Program. New York: Bureau of Applied Social Research, Columbia University, 1972.

Smith, S. "The Utility and Utilization of Evaluative Information." TEAM Associates, Inc., 1976.

Stenner, A.J. An Overview of Information Based Evaluation: A Design Procedure. Durham, NC: IBEX, Inc., 1974.

Stenzel, N. Committee Hearings as an Evaluation Format. Research on Evaluation Report No. 26, Portland, OR: Northwest Regional Educational Laboratory, 1979.

Strang, E.W. Building State Capacity Dissemination: A Literature Review. Durham, NC: NTS Research Corporation, 1977.

Stufflebeam, D.L. Meta Evaluation. Occasional Paper Series, No. 3. Kalamazoo, MI: Western Michigan University, College of Education, Evaluation Center, 1974.

Stufflebeam, D.L. and W.J. Webster. "An Analysis of Alternative Approaches to Evaluation." Educational Evaluation and Policy Analysis, 1980, 2(3).

Templin, P. Photography in Evaluation. Research on Evaluation Report No. 23. Portland, OR: Northwest Regional Educational Laboratory, 1979.

Van Geel, P., & R. Tyll. "Evaluation and Federalism." Harvard University Graduate School of Education, 1970. Cited in Wholey et al. (1971).

Weiss, C.H. "Between the Cup and the Lip." Evaluation, 1 (2), pp. 49-55, 1973.

Wholey, J.S., B.F. White, L.M. Bogt, & R.B. Zamoff. Title I Evaluation and Technical Assistance: Assessment and Prospects. Washington, D.C.: Urban Institute, February 1971. (ED 054259).

Wolf, R.L. "Trial By Jury: A New Evaluation Method" Phi Delta Kappan, 1975, 57(3), pp. 185-187.

Yeh, J.P. Test Use in Schools. Center for the Study of Evaluation. Los Angeles, CA: UCLA Graduate School of Education, 1979.